8

Managing Quality Reporting Software

In this Chapter...

For Help

HP-UX Reference

HP-UX reference information is available on the Internet at:

http://docs.hp.com/index.html

System Administrator Manager (SAM)

To start SAM, enter: `/usr/sbin/sam` at a shell window prompt.

For help inside of SAM:

■ From the dialog, click **Help**.

■ Press F1 for context-sensitive help on a specific field.

3070 Reference

3070 User and Service manuals are located on 3070 system controllers and on factory-supplied updates.

More Help

See **In Case of Difficulty** on page 10-1.

Datalogging

This section contains:

- **Correcting Datalogging Problems**, 8-2

- **Configuring Network-Wide Datalogging**, 8-3

Introduction

The datalogging process could potentially require your attention.

Datalogging is described in **Structure Of The Datalogging Files** in Chapter 2 of *Information Management*.

Correcting Datalogging Problems

If a 3070 system has a datalogging problem:

- Use `ps -ef` to verify that the `translogd` daemon, that automatically transfers log data from source queues to destination queues is running. If datalogging files are present in the source queues, `translogd` transfers them to the destination queues for processing by Agilent Pushbutton Q-STATS.

- Verify that the configuration file `tld.conf` used by `translogd` is present not corrupt. Unless it was modified, it should be exactly like the original in the directory `/var/hp3070/standard`.

- Examine (using `more`) the `translogd` daemon's error file `tld.log` to see if any error messages were logged.

- If there were a problem with `translogd`, you may need to clear out the directories where datalogging information is stored – the board subdirectories beneath the `testerq` directory, or the log data files beneath the `pbqmq` directory.

  Typically, these files are removed automatically after they are processed.

Reset the `tld.log` File Size

A repetitive error will cause the `tld.log` error file to become very large. If the size of the file exceeds 2.5 megabytes, a warning message should appear on the console.

CAUTION

⚠ Never delete the `tld.log` error file.

After correcting a datalogging problem, you can reset the error file's length to zero by moving to the `/var/hp3070/qm/logdata` directory (where `tld.log` resides) and entering:

- `> tld.log`

Configuring Network-Wide Datalogging

> **NOTE**
>
> If Agilent PR PLUS is being used on the test system, the following steps are not required for any board types specified in the Agilent PR PLUS Board Information Menu; Agilent PR PLUS automatically distributes the data for these boards.

If a 3070 system is part of a network that supports network file sharing (NFS), log data can be collected on multiple systems then automatically sent to a single system for use by Agilent Pushbutton Q-STATS.

> **NOTE**
>
> This method cannot keep track of which system produced the data. Reports generated by Agilent Pushbutton Q-STATS will not show where the data originated.
>
> Reports for a single system cannot be generated.

An Example

This example describes how to configure a hypothetical three-system network for network-wide datalogging and assumes the systems are configured for NFS networking; that is, there is a /sys directory, and so forth.

See *Management–2* for a description of the file system used by datalogging and Agilent Pushbutton Q-STATS.

The Problem

Suppose there are three systems on the network named:

1 alpha

2 beta

3 gamma

Data is collected on all three, but it is desired that system gamma process the data into SQC reports.

The Solution

Reconfigure the systems to redirect the log data from alpha and beta to gamma:

1 **Edit the** `tld.prplus` **file on systems alpha and beta.**

The file may contain comments stating not to edit it, but this is the exception. Add the single entry:

CAUTION

⚠ Be careful not to insert any spaces after the \ character on the first line.

```
/var/hp3070/qm/logdata/pbqmq \qtrans nfs
/sys/gamma/var/hp3070/qm/logdata/pbqmq
"$@"
```

Where gamma is the system hostname to process the data.

NOTE

If using `vi` to edit the file, the `:w!` command may be necessary when saving the file because `tld.prplus` is usually write protected.

NOTE

The following entry instructs the `translogd` daemon to transfer files that arrive in the `pbqmq` directory on the local system (alpha or beta) to the `pbqmq` directory on the remote system (gamma).

2 At each system, alpha and beta, make the `translogd` daemon reread its configuration file. Enter:

■ `touch RECONFIG`

The log data from systems alpha and beta is automatically sent to the `pbqmq` directory on system gamma where it is processed by Agilent Pushbutton Q-STATS.

A variation of the example is to distribute the log data and processing among systems in the network.

Once the methods described are understood, it is possible to configure the network to store log data on any system then process it on any other system.

Agilent PR PLUS

This section contains:

Introduction

Agilent PR PLUS supports multiple quality management systems across a network by creating multiple queueing directories on the local system and then copying their contents such as data files used to generate SQC reports to the remote system(s). **Figure 8-1** on page 8-6 shows an example of SQC data transfer across a network.

This section describes system administration tasks associated with the Agilent PR PLUS Paperless Repair Software. It may be helpful if data transfer problems are experienced or if configuring Agilent PR PLUS for a custom quality management system.

If a failure occurs, the error log file `/var/hp3070/qm/logdata/tld.log` may contain clues about what failed.

Figure 8-1   SQC Data Transfer Across the Network
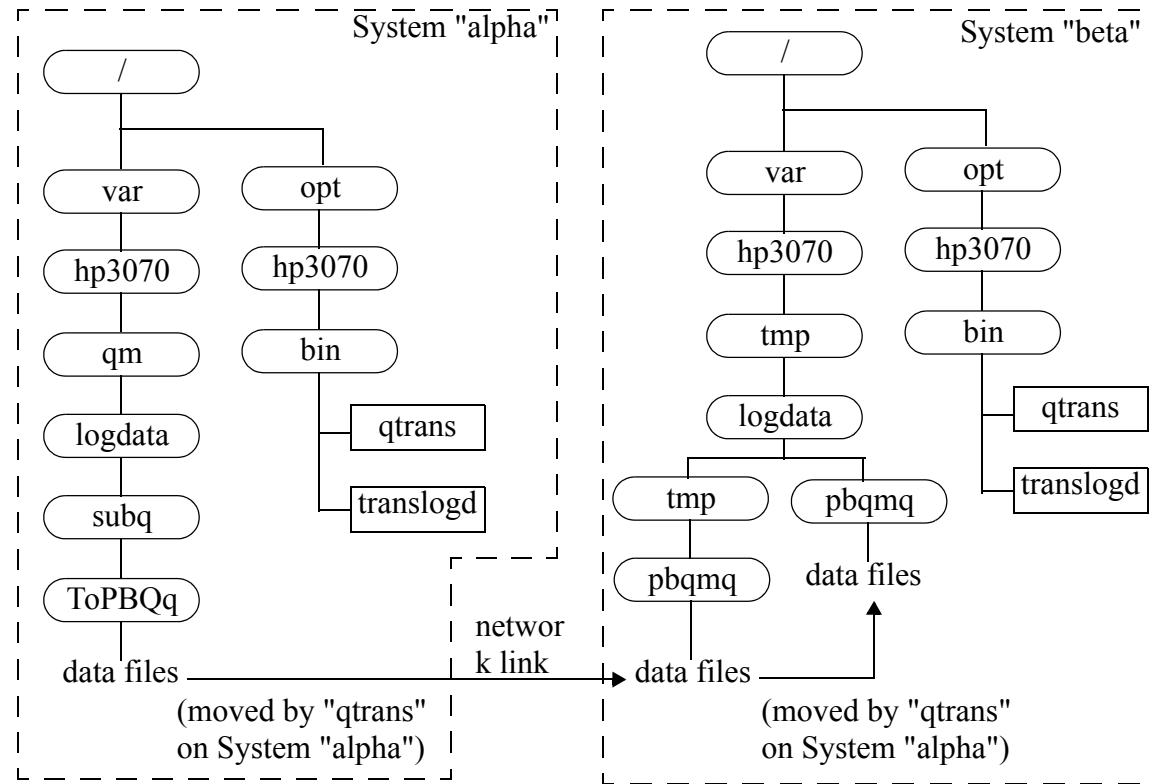
Transfer Data to a Remote System

The remote system must have a temporary directory in which the incoming SQC data can be stored.

In **Figure 8-1** on page 8-6, the local system alpha is transferring data to the remote system beta. System beta has a `tmp/pbqmq` subdirectory that will temporarily store data intended for subdirectory `logdata/pbqmq`

`logdata/pbqmq` is the input queue for Agilent Pushbutton Q-STATS.

The `qtrans` script is invoked by the `translogd` daemon program on system alpha. It first copies a data file beneath the `ToPBQq` subdirectory from system alpha to remote subdirectory `tmp/pbqmq` on system beta.

Then `qtrans` on system alpha moves the file to `logdata/pbqmq`. The original file is removed (by `qtrans`) if the copy was successfully made.

If the network link malfunctions during the transfer, the original (local) file is still intact, and the partially transferred remote file is in the temporary directory on the remote system where no other process will try to use it.

`translogd` periodically retries the transfer by directing `qtrans` until it the transfer succeeds. The use of a temporary directory in this manner provides safety when transferring files across the network.

NOTE

If the remote (temporary) directory is not found or is not writable, `qtrans` will not attempt to use it. Instead, `qtrans` copies the original file directly to the remote directory that is its destination.

Although this method is acceptable when the destination is local, no added safety is provided when transferring data to remote directories.

Similarly, data for multiple quality management systems that accumulate beneath a queueing subdirectory (`ToPBQq, ToQ2q, ToCustomSQCq`) on the local system is sent to a temporary directory on the remote system. It then arrives at its final destination on the remote system.

3070 systems come configured with temporary directories for all standard users of SQC data. For a better understanding of how these data transfers work, examine (with `more`) the `qtrans` script file.

Verify the Network

If unable to verify the network – for example, if Agilent PR PLUS's network verification feature fails – determine why.

For each system on the network, examine (with `more`) the `tld.log` error log (for the `translogd` daemon).

Some Possible Failure Causes

■ The NFS mount points for systems in the network are not setup correctly.

■ Agilent PR PLUS looks for remote file systems in `/sys`. By default, HP-UX automatically mounts file systems in `/net`. The 3070 installation customization scripts should have correctly resolved this discrepancy. Refer to **The NFS Automounter** on page 7-14 for details.

■ Defective hardware.

The printer cable might not be connected or the printer port might be improperly configured.

■ The `alarm` process might not be running

■ The `translogd` daemon might not be running.

Verify these by using the `ps` command to see which processes are running on any system in the network.

Agilent Pushbutton Q-STATS

The section contains:

Introduction

This section describes system the system administration tasks associated with the Agilent Pushbutton Q-STATS Quality Management Software.

Remove Unwanted Data

Unless manually deleted, the data that Agilent Pushbutton Q-STATS uses to produce SQC reports will continue to consume disk space.

The `qsys` Login

The `qsys` login is provided for removing unwanted data. It activates items that cannot otherwise be activated from the **File** menu including deleting data so it is not included on SQC reports.

To remove unwanted data:

1   **Log in as `qsys`**

Agilent Pushbutton Q-STATS's main form appears with additional items active in the **File** menu.

2   **Select the data removal method.**

Choose from:

Delete Board Type – Select one or more board types and remove all data that applies to them.

Delete Test – Select one or more tests and remove all data that applies to them.

Delete before Date – Select one or more board types and selectively remove data that applies to them.

3   **Select boards or tests whose data you no longer need via the same methods you would use to select their data for inclusion in a report.**

If using **Delete before Date**, specify an **End** value for the time interval. **All** existing data up to the **End** date / time for the selected board type(s) will be removed.

A **Start** value does not apply when deleting data; **Start** defaults to the beginning of any available data for the specified board type(s).

4   Click **Delete** to remove the data.

If you do not want to delete the data, select **Run Report** from the **File** menu to cancel the **Delete** mode.

5 When finished deleting data, click **Exit** from the **File** menu.

All other Agilent Pushbutton Q-STATS functions are disabled while data is being deleted. Wait until the deletion is finished before continue use of Agilent Pushbutton Q-STATS.

For more information:

- Click **Help** in Agilent Pushbutton Q-STATS's main form.

- Run the tutorial and choose **The Database Administrator Scenario**.

- See *Management–1*.

Manage Output Devices

When users click **Output Device:** in Agilent Pushbutton Q-STATS, they are shown a list of output devices to which SQC reports can be generated.

Output devices (the video monitor is the default) are classified by supported formats. Some possible formats are:

- text only (for example, a line printer).

- graphics only (a plotter).

- text and graphics (a laser printer).

Output devices are further classified according to:

- color PCL devices.

- black-and-white PCL devices.

- Hewlett-Packard Graphics Language (HP-GL) devices.

- According to their resolution (output quality).

> **NOTE**
>
> If formatting problems occur when using a laser printer, specify a different number of lines per page:
>
> Edit the `/etc/lp/interface/printername` file:
>
> Uncomment the seven lines documented in the file that change the configuration to 66 lines per page.

Select what output devices are available for SQC reports via the **Set Up Device** option in Agilent Pushbutton Q-STATS's **File** menu when logged in as `qsys`

For more information:

1 Click **Help** in Agilent Pushbutton Q-STATS's main form.

2 Run the tutorial and choose **The Database Administrator Scenario**.

Remote output devices can be used via networking if the appropriate spooling scripts are installed.